United States Department of Agriculture **Forest Service** **Pacific Northwest Region**
333 SW First Avenue
PO Box 3623
Portland, OR 97208-3623
503-808-2468

File Code: 1570
Date: December 6, 2012

Liz Sedler
Alliance for the Wild Rockies
PO Box 1203
Sandpoint, ID 83864

CERTIFIED MAIL – RETURN RECEIPT REQUESTED
NUMBER: 7011 1150 0000 9460 4665

Dear Ms. Sedler:

This constitutes my decision, pursuant to 36 CFR 215.18(b)(1), on your appeal (#13-06-00-0003-215) of Colville National Forest Supervisor Laura Jo West's Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the Power Lake Vegetation Management Project Environmental Assessment (EA).

Project Overview: On August 30, 2012, Laura Jo West, Forest Supervisor for the Colville National Forest signed a Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the Power Lake Vegetation Management Projects. Her decision to implement Alternative B includes:

- Treat (commercial harvest) over approximately 7,053 acres of vegetation
- Underburning (up to 6,000 acres) and or mechanical treatment (up to 1,053 acres) of fuels within areas commercially treated.
- Underburning and mechanical treatment of fuels outside commercially treated areas (approximately 725 acres).
- Precommercial thinning on approximately 1,769 acres
- Removal (decommissioning) of approximately 20.7 miles of road from the Forest transportation system.
- Water quality/fish habitat improvement that includes: Road relocation, upgrading 10 culverts for aquatic organism passage, culvert removal and stream channel restoration, installation of wood or rock in-stream structures, and riparian planting to stabilize streambanks and improve stream shading.
- Wildlife habitat treatments to improve aspen stands, supplement big game winter forage, and maintain meadow habitat.

Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of the appeals. The record indicates that informal resolution was not reached.

My review of this appeal has been conducted in accordance with 36 CFR 215.18, *Formal review and disposition procedures*. I have reviewed the appeal record, including the recommendations of the Appeal Reviewing Officer. A copy of his recommendation is enclosed. The Appeal Reviewing Officer focused his review on the appeal record and the issues that were raised in all of the appeals.

Appeal Decision

After a detailed review of the record and the Appeal Reviewing Officer's recommendation, I affirm the Responsible Official's decision with instructions for the Power Lake Vegetation Management Project and deny your requested relief. I instruct the Forest Supervisor to clarify whether or not harvest is proposed in structural stage 7 stands, as none are shown in the map in Appendix C of the EA. I instruct the Responsible Official to review the inventory of structural stage stands to determine whether or not any of

these stands are included for harvest. If they are not included, I instruct the Responsible Official to document this for the record and that the Forest then proceed with the project. If the stands were included for harvest, I instruct the Forest to not harvest these stands, given that no Forest Plan amendment was proposed and evaluations of the effects of such thinning were not included in the EA. This decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

A copy of this letter will be posted on the national appeals web page at http://www.fs.fed.us/appeals.

Sincerely,

/s/ Maureen Hyzer (for)

KENT P. CONNAUGHTON
Regional Forester

cc: Jerry Ingersoll
Laura Jo West
Bill Shields
Amy L Dillon
Debbie Anderson
Adam A Felts

Enclosure

United States Department of Agriculture | Forest Service | Siuslaw National Forest | 3200 SW Jefferson Way Corvallis, OR 97331 541 750-7000

File Code: 1570 **Date:** December 4, 2012

Route To:

Subject: Appeal Recommendation, Power Lake Vegetation Management Project

To: Regional Forester

Project Overview: On August 30, 2012, Laura Jo West, Forest Supervisor for the Colville National Forest signed a Decision Notice (DN) and Finding of No Significant Impact (FONSI) for the Power Lake Vegetation Management Projects. Her decision to implement Alternative B includes:

- Treat (commercial harvest) over approximately 7,053 acres of vegetation
- Underburning (up to 6,000 acres) and or mechanical treatment (up to 1,053 acres) of fuels within areas commercially treated.
- Underburning and mechanical treatment of fuels outside commercially treated areas (approximately 725 acres).
- Precommercial thinning on approximately 1,769 acres
- Removal (decommissioning) of approximately 20.7 miles of road from the Forest transportation system.
- Water quality/fish habitat improvement that includes: Road relocation, upgrading 10 culverts for aquatic organism passage, culvert removal and stream channel restoration, installation of wood or rock in-stream structures, and riparian planting to stabilize streambanks and improve stream shading.
- Wildlife habitat treatments to improve aspen stands, supplement big game winter forage, and maintain meadow habitat.

Two appeals were filed, one Dick Artley (#12-06-19-0504-215) and one by Alliance for the Wild Rockies (#13-06-00-0003-215). Mr. Artley requested that the decision be withdrawn and modified to comply with te laws of the United States, and that the responsible official be instructed to start the NEPA scoping process again for a new modified EA. The Alliance for the Wild Rockies requested that the decision be withdrawn or remanded for reasons set forth in their appeal. Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of the appeals. The record indicates that informal resolution was not reached with either appellant.

Review and Findings

My review was conducted in accordance with 36 CFR 215.19 to ensure that the analysis and decision are in compliance with applicable laws, regulations, policies, and orders. The appeal record, including the appellant's issues, has been thoroughly reviewed. Having reviewed the EA, DN/FONSI, and the project record as required by 36 CFR 215.19(b), I conclude the following:

1. The decision clearly describes the actions to be taken in sufficient detail that the reader can easily understand what will occur as a result of the decision.
2. The selected alternative will accomplish the purpose and need established.

3. The decision is consistent with policy, direction, and supporting evidence. The record contains documentation regarding resource conditions and the Responsible Official's decision document is based on the record and reflects a reasonable conclusion.
4. The record reflects that the Responsible Official provided adequate opportunity for public participation during the analysis and decision making process. The Responsible Official's efforts allowed interested publics the opportunity to comment and be involved in the proposal.

After considering the claims made by the appellants and reviewing the record, I found that the Responsible Official conducted a proper and public NEPA process that resulted in a decision that is consistent with the Colville National Forest LRMP, as amended. I found no violations of law, regulations, or Forest Service policy.

Recommendation

After reviewing the appeal record, I recommend affirming the decision. I believe that the project documentation adequately supports the Forest Supervisor's decision with regards to all appeal points raised by the appellants. I did find that a review of the EA, DN/FONSI and appeal record shows that it is not completely clear whether or not harvest is proposed in structural stage 7 stands, as none are shown in the map in Appendix C of the EA. I recommend that the Responsible Official review the inventory of structural stage stands to determine whether or not any of these stands are included for harvest. If they are not included, I recommend that this be documented and that the Forest proceed with the project. If the stands were included for harvest, I recommend that they be removed from consideration given that no Forest Plan amendment was proposed and evaluations of the effects of such thinning were not included in the EA.

Enclosed with this memo are my responses to each appeal issue.

JEREMIAH C. INGERSOLL
Forest Supervisor

cc: Debbie Anderson, Adam A Felts

Power Lake Environmental Assessment (EA)
Appeal Statements and Responses
Newport-Sullivan Lake Ranger Districts
Colville National Forest
December 2012

Appellants	**Appeal Number**
Dick Artley (DA)	12-06-00-0504-215
Alliance for the Wild Rockies (AWR)	13-06-00-0003-215

Forest Plan Amendment

Appellant Statement #1: Appellant states that the proposed treatments in LOS stands that are below HRV require an amendment to the Colville National Forest Land and Resource Management Plan (LRMP) and no such amendment was proposed. AWR at 4.

Response: I find that the Responsible Official appears to have followed the direction and met the requirements in the Eastside Screens for timber sales, but that the record is not clear as to whether or not harvest will occur in structural stage 7 stands.

The direction for timber sales follows the guidelines that have been described in the Colville National Forest Land and Resource Management Plan, as amended by the 'Eastside Screens'. See Regional Forester's Forest Plan Amendment #2 or Eastside Screens Appendix B; (a) page 10 and (2)12, which states that all remnant late and old seral and/or structural live trees ≥21" dbh that currently exist within stands proposed for harvest activities are to be retained. Harvest may not occur in late or old structure stands that are below HRV. The EA indicates that LOS stands in structural stage 6 are above HRV, except for the cold/moist biophysical group. LOS stands are below HRV in all structural stage 7 stands in the planning area. EA at 51. Reducing late and old structure by removing 21"+ dbh trees or decreasing snow intercept thermal cover in big game winter range in order to regenerate aspen would not occur. EA at 59.

A review of the EA, DN/FONSI and appeal record shows that it is not completely clear whether or not harvest is proposed in structural stage 7 stands, as none are shown in the map in Appendix C of the EA. I recommend that the Responsible Official review the inventory of structural stage stands to determine whether or not any of these stands are included for harvest. If they are not included, I recommend that this be documented and that the Forest proceed with the project. If the stands were included for harvest, I recommend that they be removed from consideration given that no Forest Plan amendment was proposed and evaluations of the effects of such thinning were not included in the EA.

Wildlife and Old Growth – Effects and Standards and Guidelines

Appellant Statement #2: Appellant states that the EA "does not explain how the forest plan standard of 100% potential population levels of primary cavity excavators would be maintained in non-regeneration units given that higher levels of snag loss due to OSHA/safety provision would occur during aerial-based yarding methods, especially helicopter logging." AWR at 6.

Response: I find that the EA acknowledges that some snags would be lost in the name of worker safety, which includes the loss based on yarding method.

Forest Plan standards for maintaining dead wood habitat within timber harvest units were amended by the Regional Forester's Forest Plan Amendment #2 (Lowe, 1995), also known as the Eastside Screens for Timber Sales. The Eastside Screens require sufficient snag habitat be retained within harvest units to support 100 percent of the potential population of primary cavity excavators throughout the rotation cycle.

The Power Lake EA and DN specify required mitigation for snag creation. The DN and EA state that snags would be created within regeneration harvest areas as needed to provide for 100% of the cavity nesting population. DN at C-14 and EA at 40.

Snags and logs are addressed in numerous places in the EA. Project design criteria include provisions to retain snags and broken-topped trees to the extent feasible, and logs that are at least 14 inches diameter at the small end. EA at 38. Project design criteria also include a provision to retain live green trees that are hollow, or that have obvious woodpecker cavities. EA at 38. In the summary of project effects table it is stated that Alternatives B and C would reduce small dead tree habitat in the short-term, but would accelerate the development of larger trees. Large snags and logs would be recruited from these over time. EA at 108. Snag creation costs are displayed in a table showing project activities. EA at 140. No timber harvest would occur in stands that meet the North Idaho Old-Growth definition, or within designated core habitat areas for old-growth associated species. EA Appendix C at C-40. These are areas where large snags can be expected to occur on the landscape. Prescribed burning as proposed in Alternatives B and C would likely result in a net increase of snags. EA Appendix C at C-68.

The report for management indicator species (MIS) states that the project would move the area closer to the HRV for stand structural stages. Forest Plan requirements for the maintenance of dead wood habitats would be exceeded. Therefore, it is expected that populations of primary cavity excavators would continue to be viable on the Colville National Forest. Appeal Record, Power Lake MIS Report at 49.

There are provisions for creating snags in the regeneration units and retaining existing snags over 10 inches diameter. The MIS report does state that much of the area would be logged by mechanical methods, which maximizes the ability to retain existing snags. Appeal Record, Power Lake MIS Report at 46.

Appellant Statement #3: Appellant states that the EA is vague as to how interim wildlife numerical standard 6(d)(4)(a)(2) would be met and that the "EA simply fails to state the standard, and include project design provisions that would ensure meeting the numerical standard." AWR at 6.

Response: I find that the EA provides adequate information for the Responsible Official to determine that wildlife standards would be met.

The direction for dead wood is found in Appendix B of the Regional Forester's Forest Plan Amendment #2 (Lowe, 1995), also known as the Eastside Screens for Timber Sales. The project record contains a thorough analysis of snag and log numbers, including an estimate of historic conditions, current conditions, and expected conditions with implementation of the alternatives. Appeal Record, MIS report. In addition, the EA contains the provisions in the project design criteria and mitigations that are designed to meet the standard.

The MIS report contains estimates of historic levels of snags and logs derived from DecAID. Appeal Record, MIS Report at 43 and at 45. The EA displays the estimate of current snag levels derived from stand exam data for the project and a qualitative estimate of down wood cover is made in the MIS report. Appeal Record, MIS Report at 44 and 45.

Project design criteria include provisions to retain snags and broken-topped trees to the extent feasible, and logs that are at least 14 inches diameter at the small end. This measure is designed to meet Eastside Screens. EA at 38. There is also a provision to retain live green trees that are hollow, or that have obvious woodpecker cavities. EA at 38. No trees equal to or larger than 21" would be cut except if they are located on new road or landing sites. EA at 38.

In the summary of project effects table it is stated that Alternatives B and C would reduce small dead tree habitat in the short-term, but would accelerate the development of larger trees. Large snags and logs would be recruited from these over time. EA at 108.

Prescribed burning as proposed in Alternatives B and C would likely result in a net increase of snags. EA Appendix C at C-68.

Appellant Statement #4: Appellant states that the EA "completely fails to demonstrate compliance with Interim wildlife standard 6(e)(1)" by demonstrating consideration of whether or not project goals and objectives could be adequately achieved by activities in non-LOS stands "as a first priority"; or, as a second priority including only "smaller, isolated LOS stands <100 acres in size, and/or at the edges (first 300 ft) of large blocks of LOS stands (> 100 acres)." AWR at 7.

Response: I find the Responsible Official followed the direction in the Eastside Screens, specifically Standard 6(e)(1).

The direction is found in the Eastside Screens Appendix B, which states that "[t]he intent of the following direction is to maintain options by impacting large and/or contiguous stands of LOS as little as possible, while meeting other multiple use objectives.

> 1) Harvest activities, (any and all types being considered), can occur in the following stand types in order of priority:
>
> > a) Activities should occur within stands other than LOS as a first priority.
> > b) Second priority for harvest activities is within smaller, isolated LOS stands <100 acres in size, and/or at the edges (first 300 ft) of large blocks of LOS stands (~ 100 acres).
> > c) Some harvesting can occur, but only as a last priority, within the interior of large LOS stands (~100 acres);
> > REGENERATION AND GROUP SELECTION ACTIVITIES ARE NOT ALLOWED."

The EA, in the project effects summary for MIS species, states that "[n]o project activities would occur within old growth stands or designated habitat areas. Timber harvest and fuels treatments would reduce overhead canopy and horizontal cover. The great majority of large trees (21"+) would be retained. Over the long term, commercial thinning and other intermediate harvests should accelerate the development of large tree habitats. Forest fuel loads would be reduced, leading to a reduced risk of intense fire behavior. Project activities within travel corridors would be designed to maintain overhead canopy and understory cover according to existing direction (Lowe, 1995)." EA at 107.

In Appendix C of the EA, the project design criteria for late-successional dependent species specifies that no harvest would occur in any stands meeting the North Idaho Zone Old Growth definition that are identified during future reconnaissance or unit layout. In addition it is specified that within the interior of large late and old structural stage stands (>100 acres) harvest activities would be limited to thinning, selection, salvage, or other non-fragmenting prescriptions. Only use group selection to mimic natural forest patterns; do not exceed ½ acre in created opening size. EA Appendix C at C-21.

A map showing MA-1, MIS core areas and travel corridors in relation to harvest units is included in Appendix C of the EA. In the effects section for fishers the EA states that: "Within the interiors of SS6 stands that are at least 100 acres in size (beyond 300 feet from a forest edge), timber harvest would be limited to non-fragmenting prescriptions such as commercial thinning, single tree selection, and other prescriptions that do not create openings larger than ½ acre, as required by the "Eastside Screens for Timber Sales" (Lowe, 1995)." EA Appendix C at C-41.

Appellant Statement #5: Appellant states that the Forest Plan standards "are not based upon scientific research regarding the forestwide amount and distribution of habitat needed to insure viability of old-growth associated wildlife" and that the Forest does not maintain a forestwide old-growth inventory in violation of NFMA. AWR at 8 and 11.

Response: I find that Forest addressed this appeal statement sufficiently in the EA and Response to Comments section of the DN (Appendix A). Maintenance of a Forest-wide inventory is outside the scope of this analysis.

Table 5.2 of the Colville National Forest Land and Resource Management Plan (LRMP) outlines monitoring that is expected to take place. For old-growth dependent species the action is to determine if old-growth habitat is being managed to maintain viable populations of old-growth dependent species. The units to be measured are (1) areas of suitable old-growth habitat and (2) number of successful barred owl nests and number of owls. Suggested methods for monitoring are (1) old-growth inventory, (2) project reconnaissance, (3) timber stand exams, and (4) calling counts. The frequency is 10% of the MA-1 areas annually. Colville LRMP at 5-12.

Similar comments were received during the 30-day comment period and the responses are included in Appendix A of the DN, #97 and #98. Specifically, response #97 states that "[p]age 2-19 of the Colville National Forest Land and Resource Management Plan lists information needs desirable to fill before completion of the next forest land and resource management plan. 'This section includes studies leading to better understanding of ecosystem needs in order to maintain various aspects of long-term productivity.' Part of the need is listed as: 'Inventory wildlife habitats: riparian, wetlands, old growth forests, snags and lodgepole pine by biological, chemical, and physical characteristics." Completion of a forest-wide inventory is not listed as required. A forest-wide inventory is therefore outside the scope of the Power Lake analysis. DN Appendix A at A-42.

Response to comment #98 states that "[t]he Colville Forest Plan does not have a page 5-20, so the statement related to old-growth dependent species appears to actually reference part of Table 5.2 located on page 5-12. Part of the table displays items specific to barred owl and other old growth dependent species habitat diversity that would be monitored during Forest Plan implementation (direction for monitoring is found in the LRMP on page 5-7). The purpose for this monitoring is listed as: 'Determine if old growth habitat is being managed to maintain viable populations of old growth dependent species and meet management objectives for barred owl.' Methods to be used include (1)

old growth inventory, (2) project reconnaissance, (3) timber stand exams, and/or (4) calling counts within areas of suitable old growth habitat." Project reconnaissance and timber stand exams have occurred within the Power Lake planning area; resulting information and analysis is located within the wildlife and silviculture reports in the project file. Forest-wide monitoring has occurred related to this monitoring item; additional forest-wide monitoring is outside the scope of the Power Lake analysis. DN Appendix A at A-43.

In addition, comment response #101 displays the various surveys that have been done for wildlife, including late-successional dependent species, in the project area. DN Appendix A at A-45. Maps in Appendix C of the EA show the LOS habitat in the project area.

Appellant Statement #6: Appellant states that the DN doesn't clearly state the commitment to continue to review stands for old growth characteristics and that it is unclear that the Forest will try to locate old growth in the project area at any specific time in the future prior to harvest. AWR at 8.

Response: I find that the Responsible Official has included project design criteria in the selected alternative that will require the agency to review stands for old growth characteristics in the project area.

The Code of Federal Regulations (CFR) at 36 CFR 220.7(b)(2)(iii) directs the agency briefly describe the proposed action and alternative(s) that meet the need for action. The regulation at 36 CFR 220.7(b)(2)(iii) further directs the agency that the description of the proposal and alternative(s) may include a brief description of modifications and incremental design features developed through the analysis process to develop the alternatives considered.

In the DN, the Responsible Official decided to implement Alternative B (EA pages 17 through 21) including the project design criteria, BMPs, mitigation (EA pages 25 through 40, and Appendix C of this Decision Notice), and monitoring (EA pages 40 to 41). DN at 2. The project design criteria includes a requirement that "A wildlife biologist, botanist, recreation specialist, fisheries biologist, landscape architect, or hydrologist would assist the silviculturist in developing site specific prescriptions, marking guidelines and monitoring if units are located within RHCAs, wildlife habitat. . ." EA at 27. An additional project design criterion states "[d]o not harvest any stands meeting the North Idaho Zone Old Growth definition that are identified during future reconnaissance or unit layout." EA at 38.

The implementation plan included in the EA requires that the district wildlife biologist would be responsible for ensuring that the necessary monitoring for winter range, snag retention levels, and old-growth dependent wildlife species is accomplished. EA at 42.

The disclosure of the effects of the proposed action and alternatives concludes that no project activities would occur within old growth stands or designated habitat areas. EA at 107. The disclosure of effects on management indicator species concludes that no project activities would be planned within stands meeting the North Idaho Zone old growth definition, or within designated habitat areas for old growth associated species. Appeal Record, MIS Report at 56. Finally, stands already identified as old growth have been excluded from commercial treatment. EA at 52 and Appeal Record, Silviculture Report at 17.

Appellant Statement #7: Appellant states that the Forest has not conducted the required old growth inventory, has not conducted required monitoring for wildlife MIS, and has failed to publish a Forest

Plan Monitoring and Evaluation Report for many years, despite being an annual requirement. AWR at 9 and 13.

Response: I find evidence that pre-project surveys, including project reconnaissance and stand exams were done for this project. I find that this appeal statement is addressed sufficiently in the response to comments section of the DN (Appendix A). I also find that failure to publish a Forest Plan monitoring report is outside the scope of this analysis.

Table 5.2 of the Colville Forest Plan outlines monitoring that is expected to take place. For old-growth dependent species the action is to determine if old-growth habitat is being managed to maintain viable populations of old-growth dependent species. The units to be measured are (1) areas of suitable old-growth habitat and (2) number of successful barred owl nests and number of owls. Suggested methods for monitoring are (1) old-growth inventory, (2) project reconnaissance, (3) timber stand exams, and (4) calling counts. The frequency is 10% of the MA-1 areas annually.

For MIS species the actions are to determine if indicator species are being managed at acceptable levels. The units to be measured are acres of suitable habitat in defined distribution, and localized population or activity trends within specifies areas. Suggested methods are aerial photographs and field examination of habitat including transects, and call and count routes; and Department of Wildlife records. It was expected that at least one pre-sale and one post-sale project would be monitored per year per District. Colville LRMP at 5-12.

In February 2011 the Regional Office outlined the process for project level NEPA analysis for MIS species. In that document it is stated that amount and quality of habitat for MIS species can be used as a proxy for surveys if survey data is not available due to lack of funding or feasibility of monitoring populations. Lands Council v. McNair, 2010 is cited as the ruling that has led to this policy.

Similar comments were received during the 30-day comment period and the responses are included in Appendix A of the DN, #97, #98, and #99. See Appellant Statement #5 for response to comment #97 and #98, which address the old-growth inventory issue. As indicated in the response to comment #99, "[a]n information need listed in Colville LRMP (page 2-18) is to assess the effects of landscape patterns of timber harvest and road construction on biological diversity (including management indicator species). Table 5-2 in the LRMP states the forest would monitor levels of indicator species habitats and utilization using aerial photographs, field examination of habitat, and/or Department of Wildlife records. The District wildlife biologist utilized field and database information to complete this analysis. Existing condition and effects analysis information is in the wildlife reports in the project file and in the EA (Chapter 3)." In addition, the response states that "[m]onitoring for primary cavity excavators population trends and snag numbers, sizes, species and use is also listed in Table 5-2 on page 5-12. Purpose of the monitoring is to determine if habitat for snag dependent species is being managed properly. Methods recommended for use include pre-and-post project review of snag numbers and live wildlife trees/acre in harvest units. Review of the project area related to existing condition and analysis of direct and indirect effects was conducted by the District wildlife biologist. The District biologist regularly monitors pre- and post-project conditions to determine green and dead snag levels related to wildlife needs. Determinations of effects are listed in the wildlife reports in the Power Lake project file and in the EA (Chapter 3)." DN Appendix A at A-43.

In the EA implementation plan, the district wildlife biologist is responsible for ensuring that the necessary monitoring for winter range, snag retention levels, and old-growth dependent wildlife species

is accomplished. EA at 42. Lastly, stand exams done for this project found very few trees over 150 years old, and two stands that are suspected of meeting the old-growth definition were dropped from the project. Appeal Record, Silviculture Report at 17.

Appellant Statement #8: Appellant states that the EA does not demonstrate consistency with the Forest plan requirements regarding management area (MA) 1, particularly the 300-acre core area requirement for 300 contiguous acres of old-growth as a core. AWR at 10. Appellant further states that the EA and biological evaluation (BE) are not clear how structural stages utilized in the EA correspond to Forest Plan structural stages V and VI. AWR at 11.

Response: I find that the project properly implements the Forest Plan with regard to MA 1 core areas primarily since no harvest or road construction is planned in MA 1.

The MA 1 core areas are designated to provide essential habitat for wildlife species that require old growth forest components. Old-growth management areas will be at least 600 acres in size. They may be managed as a whole, or separated into core areas and foraging areas. Core areas are at least 300 acres in size and are allocated as MA 1. Foraging areas 30 to 300 acres in size, will be of sufficient acreage when added to the core to make the total size of the management area 600 acres. Colville LRMP at 4-70.

The MA 1 core area in the project area is 558 acres. Within SS6 and SS7 stands that are at least 100 acres in size, any timber harvest proposed beyond 300 feet from a forest edge would be limited to non-fragmenting prescriptions such as commercial thinning, single tree selection, and other prescriptions that do not create openings (Lowe, 1995). The intent would be to maintain the micro-climate and other conditions of forest interior habitats in late and old successional stage stands. These stands fit the criteria of foraging acres and make up the remainder of the 600 acre core habitat.

No scheduled timber harvest is permitted, but habitat improvements for old-growth dependent species are encouraged in old forest areas. The DN states that there would be no harvest or road construction within any old-growth areas or core pine marten areas. DN at 15.

Appendix C of the DN details the project design criteria for the project. Requirements include no harvest in any stands meeting the North Idaho Zone old-growth definition that are identified during future reconnaissance and layout; harvest activities within the interior of large late and old structural stage stands (> 100 acres) are limited to thinning, selection, salvage, or other non-fragmenting prescriptions. Other criteria include only use of group selection to mimic natural forest patterns; do not exceed ½ acre in created opening size; and no trees $\geq$ 20" can be cut with the exception of those in new road or landing locations. EA Appendix C at C-13.

Table 17 of the MIS Report displays the current condition of the MA 1 and pine marten core areas in the project area. Appeal Record, MIS Report at 33.

Appellant Statement #9: Appellant states that the EA and BE do not discuss the consistency of the project with wildlife standard 4 from the Forest Plan. AWR at 11.

Response: I find that the project design criteria included in the action alternatives would protect unique habitats in the project area. No unique ecosystems were identified, however springs, seeps, wetlands

and hardwood trees would be protected. These sites can be important habitat for species not otherwise covered by other Forest Plan standards and guidelines.

The direction in the Forest Plan under wildlife standard 4 is to give special consideration to management or protection of unique habitat components, not covered by other management indicator species, during evaluation of activities that may affect such habitats and the species that are dependent on them. Colville LRMP at 4-41.

The EA states that there are no unique ecosystems in the project area. EA at 135. Wetlands are identified in the EA. EA at 78. Sensitive plant sites are protected by design criteria # 4 and #6. EA at 26. Wetlands are protected in the project design criteria #80 and are intended to protect several wildlife species. EA at 37. Wetlands, springs and seeps are protected by design criteria #40. EA at 30. Design criteria #90 requires retention of hardwoods to further protect species that require riparian or hardwood forests. EA at 39.

Appellant Statement #10: Appellant states that surveys in the project area do not validate the effectiveness of forest plan MA 1 and MIS block designations for maintaining viable, well-distributed populations of old-growth associated wildlife species. AWR at 11.

Response: I find that Forest Pan effectiveness monitoring is outside the scope of the Power Lake analysis. The pre-project and reconnaissance surveys that have been done are sufficient to meet determine how the project area provides habitat for MIS.

The biological evaluation includes a table showing that surveys were done in MA 1 and core habitat areas, and for forest carnivores, among other species. EA Appendix C at C-84. See also response to Appellant Statement #7 for more information.

Appellant Statement #11: Appellant states that "the cumulative effects analyses for pileated woodpecker and other old-growth associated species does not discuss the implications of all this habitat modification and destruction in its discussions of current habitat conditions in the project area affecting population viability." AWR on 13.

Response: I find that the management strategy used by the Colville National Forest to ensure viability of old-growth associated species is sufficiently explained in the MIS report for this project, and that a conclusion relative to population viability is made for this project.

The Forest Plan states that MIS were chosen to provide habitat needs of all vertebrate species, to monitor selected habitats that could become limiting to some species through forest management activities, and to provide sufficient populations of selected species to meet demands for wildlife-related recreation. Colville LRMP at 4-10.

Standards and guidelines for indicator species habitat management are found on pages 4-38 to 4-42 of the Colville National Forest Land and Resource Management Plan. These required measures were intended to ensure that timber harvest and other forest management activities would not lead to the loss of viability of MIS populations.

Presently, the Colville National Forest manages source habitats for old growth associated species based on the concept of Historic Range of Variability (HRV). By managing habitat within the HRV, it is assumed

that adequate habitat would be provided because species survived within that range of habitat levels in pre-settlement times. By managing current habitats within the range of historic variability, the Forest will likely do an adequate job of ensuring population viability for old growth associated MIS (Landres et al, 1999). Appeal Record, MIS Report at 38.

Pine marten and pileated woodpeckers are managed according to strategies identified in a Forest-wide viability analysis. The strategies that pertain to the project area are included in the analysis, and project design elements that implement those strategies are included in the proposed action. Appeal Record, MIS Report at 38-40.

The Power Lake project was designed to have insignificant or discountable impacts to large diameter trees, snags, and down logs at the scale of the Colville National Forest. The broad intent of forest management proposed with the project is to move the area closer to the HRV for stand structural stages, and closer to the historic fire regime. Thus, we expect this project, when combined with other forest management projects proposed or underway on NFS lands, would not reduce the population of old growth associated MIS, or threaten their viability across the Forest. Appeal Record, MIS Report at 40.

Appellant Statement #12: Appellant states that contrary to the Forest Service's own best available science, "the CNF has relied exclusively upon project-level habitat designations as its only viability strategy." AWR at 13.

Response: I find that the analysis of effects MIS species properly included a viability analysis at the Forest scale, in accordance with current direction.

The Forest Plan states that MIS were chosen to provide habitat needs of all vertebrate species, to monitor selected habitats that could become limiting to some species through forest management activities, and to provide sufficient populations of selected species to meet demands for wildlife-related recreation. Colville LRMP at 4-10.

Standards and guidelines for indicator species habitat management are found on pages 4-38 to 4-42 of the Colville National Forest Land and Resource Management Plan. These required measures were intended to ensure that timber harvest and other forest management activities would not lead to the loss of viability of MIS populations.

In February 2011 the Regional Office outlined the process for project level NEPA analysis for MIS species. In that document it is stated that amount and quality of habitat for MIS species can be used as a proxy for surveys if survey data is not available due to lack of funding or feasibility of monitoring populations. Lands Council v. McNair, 2010 is cited as the ruling that has led to this policy.

The viability statements are included in the cumulative effects section of the MIS report for each affected MIS species. The viability analysis was done at the Forest scale, and tiered to a 2012 Forest-wide viability analysis of MIS species on the Colville NF (Don Youkey, August 2012). These include: beaver – MIS Report at 22; deer/elk – MIS Report at 28; barred owl, pileated woodpecker, pine marten – MIS Report at 37-38; primary cavity excavators – MIS Report at 49; northern three-toed woodpecker – MIS Report at 51; dusky grouse – MIS Report at 53; spruce grouse – MIS Report at 54; large raptors and great blue heron – MIS Report at 57-58; and waterfowl – MIS Report at 59.

Appellant Statement #13: Appellant states that the EA and DN violate NEPA because they do not address the scientific opinion of the 1999 Committee of Scientists and that this science is contrary to the Forest's assumptions about MIS habitat management. AWR at 14.

Response: I find the Responsible Official did address scientific opinions that support MIS habitat management.

The regulation at 36 CFR 220.7(b)(3)(i) directs an EA to "…briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an EIS or a FONSI (40 CFR 1508.9)."

In addition to disclosure concerning MIS in the EA, it is also discussed in the biological evaluation and DN. EA at 103-109; BE at 81. In the DN it refers to a document titled "Status of Management Indicator Species on the Colville National Forest" that was completed (Youkey, 2012) and incorporates by reference the findings in the "Terrestrial Species Viability Assessments for the National Forests in Northeastern Washington" (Gaines et al. 2012). DN at 15. This document updates the analysis of MIS for the Forest and has greatly improved the knowledge of habitat requirements of forest wildlife in the Pacific Northwest. Viability determinations have been analyzed for the many MIS, referencing a variety of literature citations.

In the DN a finding of no significant impact was made by the Responsible Official. On June 11, 2012, the US Fish and Wildlife Service concurred that this project as described in the biological evaluation is not likely to adversely affect the Canada lynx, grizzly bear, or bull trout. The concurrence letter is in Appendix C of the EA and the project record. DN at 20. Further, in appendix C of the DN, required mitigation for TES and other wildlife species is provided. DN, App. C at C-14.

Appellant Statement #14: Appellant states that the Forest violated NFMA because fishers have been extirpated from the Forest. AWR at 15.

Response: I find that the Responsible Official's decision meets manual and Forest plan direction for the fishers and fisher habitat.

Fisher is a Region 6 sensitive species. Management of sensitive species "must not result in a loss of species viability or create significant trends toward federal listing" (FSM 2670.32). The Colville National Forest LRMP provides no direction for managing habitat specifically for fishers. However, it addresses the habitat needs of old growth associated species with a forest-wide network of "core" reproductive habitat areas for pine marten and pileated woodpeckers, and a specific management area for barred owls (MA1). Where these reserved areas are located in low to mid-elevation, mesic forest stands, they could also provide essential habitats for fishers. Appeal Record, Wildlife Biological Evaluation (BE) at 35.

A Colville LRMP goal is the protection and management of fish and wildlife habitat. LRMP at 4-10. Though extirpation of fisher is outside the scope of the project, and there are no known records of this species within or near to the Power Lake Project Area (Appeal Record, Wildlife BE at 37), project design criteria were included in the project to provide for fisher habitat and meet Forest Service Manual and LRMP direction, and include:

- Do not harvest any stands meeting the North Idaho Zone Old Growth definition that are identified during future reconnaissance or unit layout.

- Within the interior of large late and old structural stage stands (>100 acres) limit harvest activities to thinning, selection, salvage, or other non-fragmenting prescriptions. Only use group selection to mimic natural forest patterns; do not exceed ½ acre in created opening size.
- Retain all live trees 21"+ in diameter, with the exception of those located within new equipment or road corridors, or landings. Wildlife BE at Table 13, p. 20

The Forest has successfully implemented these practices with other vegetation management projects completed on the ranger districts. These practices have proven to be effective in avoiding or minimizing potential negative effects of forest management projects to the essential habitats of TES and other wildlife species. Appeal Record, Wildlife BE at 19.

The project wildlife biologist determined that the project would degrade certain habitat parameters such as stand canopy closure over large portions of the project area over the short term. However, the project would initiate long-term positive trends in fisher habitat maintenance and development. The great majority of large, live trees, snags and down logs would be retained on site within harvest units. Project impacts to habitat connectivity, interior forest habitat, and late and old structural stage stands, would be within the guidelines established in the "Eastside Screens for Timber Sales" (Lowe, 1995). The project would be intended to move the area closer to its historic fire regime and should dramatically reduce the risk of stand replacing fires removing large swaths of potential fisher habitat (Wildlife BE p. 42). Thus the project is expected to improve fisher habitat over the long-term.

Appellant Statement #15: Appellant states that the EA does not analyze and disclose the cumulative impacts of motorized recreation (with reference to the South End project) and dispersed camping on important fisher habitats that may be needed for population recovery. AWR at 15.

Response: I find that the cumulative effects analysis for fisher need not consider potential impacts of motorized recreation or dispersed camping since fishers are not known to exist in the cumulative effects area, and as such, recreational activities would not cause a cumulative effect to habitat. The cumulative effects analysis does consider impacts to suitable habitat and connectivity from past and current timber harvest in the cumulative effects area.

The regulation at 36 CFR 220.7b(3)(iv) states that in an EA, the agency may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

Sensitive species and their habitats are managed by the Forest Service to ensure that the species do not become listed as Threatened or Endangered. Management of sensitive species "must not result in a loss of species viability or create significant trends toward federal listing" (FSM 2670.32).

The biological evaluation states that fishers are not known to exist in the project area or on the Forest. Fisher sightings are very rare in northeast Washington. There are no known records of this species from within or near to the Power Lake Project Area. Biologists with the Washington Department of Fish and Wildlife did not detect fisher sign during a winter tracking survey conducted in the area (D. Base and S. Zender, 1999). The EA states that surveys were conducted for a total of 48 days of remote camera trapping at four separate sites in the project area in the summer of 2011. The cameras detected deer, elk, moose, coyotes, hares, squirrels, bears, a bobcat, and a cougar, but not fishers. EA Appendix C at C-38.

Unroaded Areas

Appellant Statement #16: Appellant states that the EA and DN are in violation of NEPA by failing to consider the best available science regarding the ecological values of unroaded areas (wilderness quality lands) and failing to consider the significant impacts on unroaded areas and their ecological values from implementation of the selected alternative. AWR at 20-23.

Response: I find that the responsible official fully considered the values of unroaded areas, when selecting alternative B.

The regulation at 36 CFR 220.7(b)(3)(iii) directs an EA to "describe the impacts of the proposed action and any alternatives in terms of context and intensity as described in the definition of ''significantly'' at 40 CFR 1508.27, while the regulation at 36 CFR 220.7(b)(3)(iv) states that in an EA, the agency '[m]ay discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately".

In the beginning of the EA, the document discloses that to reduce potential impacts, no project activities would be allowed in any Forest Plan designated roadless areas or potential wilderness areas. EA at 6. Also in Chapter III, under Effects of Implementation it states that "[t]his project is not adjacent to, nor would it have any effect on, existing or proposed wilderness areas, Forest Plan designated roadless areas, or Research Natural Areas." EA at 45. Again in EA under Congressionally Designated Areas, unique ecosystems the EA states that "[t]he Power Lake Planning Area does not contain, nor is it within an influence zone for, any existing or proposed wilderness, wilderness study area, wild and scenic river area, national recreation area, research natural area, Forest Plan designated roadless area, or municipal watershed. There are no unique ecosystems within the planning area." EA at 135. In the Decision Notice under the Finding of No Significant Impact, intensity criteria number 3, it states that "[t]here will be no significant effects on unique characteristics of the geographic area such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas by implementation of my decision. [40 CFR §1508.27(b)(3)]. (EA pgs 6, 45, and 133-135)." DN at 19.

I also find that the concern about impact to unroaded area was further and fully discussed in the Response to Public Comments, Appendix A of the DN, at Comment 74.

It states that "[t]o our knowledge, NEWFC used presence of roads to determine location of their restoration zone (RZ), but no other criteria. The Forest Service has received no measurable criteria or objectives related to their RZs. They established no lower limit for the size of a discrete RZ. Adjacent roads and motorized trails were not buffered and some RZs are bisected by these features. Wildlife using areas located near open roads and motorized trails are subject to disturbance and an increased risk of poaching. Forest stands in these areas are subject to the loss of dead wood habitat to firewood cutting, the harvest of special forest products such as berries and mushrooms, and forest edge effects.

In the Power Lake project area, NEWFC's mapped RZs include portions of County Road 2022, several open and closed Forest Roads, the entire Middle Fork Calispell ATV Trail, and older timber harvest units. A RZ that overlaps the northwestern edge of the project area includes the 49 Degrees North Mountain Resort. This special use permit area has been permanently modified with buildings, parking lots, downhill ski runs and nordic ski trails. Human use of the site is intensive and year- round. In contrast, a

mapped RZ in the southwest portion of the project area does not include more than 100 acres of National Forest System (NFS) land that is un-roaded and contiguous to the RZ.

There are no inventoried roadless areas within the Power Lake Project Area. There are several un-roaded blocks ranging in size from a few hundred acres to 1,000 acres or more. Alternative B would construct roads and harvest timber in these areas. All roads constructed in the presently un-roaded blocks would be temporary roads. Temporary roads are designed with minimum clearing limits. They are intended to be decommissioned immediately after use and no longer function as a roadbed. The great majority of the commercial timber harvest proposed would be commercial thinning or single tree selection prescriptions. These harvests would be designed to reduce fire risk /intensity by reducing surface and ladder fuels. They would also be designed to move dry site, multi-storied stands with large trees to single-storied, park-like stands with large trees; thereby restoring their ecological function. Such stewardship projects in un-roaded areas can have "strong local benefits to biodiversity by increasing the survival of large, old growth pines after wildland fires, reducing mortality from moisture stress; reducing insect and disease outbreaks in stressed stands, restoring fire-dependent herbs and shrubs; and restoring the historical fire regime" (Martin, et al, 2000)." DN, Appendix A at A-28.

Thus, based on the information found in the EA and in the response to comments, I find that the issue of unroaded areas has been adequately addressed.

Appellant Statement #17: Appellant states that "[l]ogging undeveloped areas would only further move the project's forest ecosystem lands away from, instead of toward, the historic range of variability for large snags, viable wildlife habitat, core interior habitat, and other LOS components. For a project that aims to restore historical conditions for species composition, the Forest Service fails to recognize the irony of pushing other rare aspects of landscapes, such as roadless lands and previously unlogged lands, further away from historical levels." AWR at 21.

Response: I find that the Responsible Official has fully considered the values of unroaded areas when selecting alternative B. See response to Appellant Statement #16.

Fire Suppression

Appellant Statement #18: Appellant states that the EA and DN fail to consider the cumulative effects of fire suppression, never disclosing the forestwide impacts of its current policy of all-out fire suppression. Appellant further states that nothing in this EA indicates this policy will change after implementation of this project. AWR at 16.

Response: I find that the Responsible Official adequately disclosed the effects of the proposed action and alternatives, including the effects of fire suppression. Forest-wide policy regarding fire suppression is beyond the scope of this analysis.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity.

The Responsible Official disclosed that many stands have been substantially altered from their historic range of variability by the suppression of wildfires over the past 100+ years resulting in increased ladder fuels and growth of tree species that are less tolerant of fire and that this has resulted in a higher probability of increased fire size, frequency, intensity, and severity across the landscape. The EA also

discloses that there is increased risk of detrimental effects to key ecosystem components like watershed function and wildlife habitat as the probability of higher intensity wildfire increases. DN at 10-12 and EA at 2-3.

In disclosing the effects of the alternatives, the EA states that stand replacing fires can have much greater negative effects in unmanaged stands where fire suppression has been occurring for several decades. DN Appendix A at A-29. A-49. A-50. A-62. The EA further discloses that fire suppression has allowed several cohorts of fire intolerant species to develop under the older seral species that are present in the subwatershed and that a lack of disturbance, some of which can be attributed to fire suppression, has allowed these stands to develop highly stocked, multi-story conditions that did not occur historically. EA at 47-48 53.

In describing the affected environment and the effects of the proposed action and alternatives, the EA discloses that little acreage has burned since 1938 because of fire exclusion and describes the effects of fire exclusion along with other past, present and reasonably foreseeable activities. EA at 65-73; Appeal Record, Fire, Fuels & Air Quality Report at 14-15, 19.

The effects of fire exclusion on wildlife habitat and forest vegetation relative to historic conditions are also described. EA Appendix C at C-39; Appeal Record, Appendix C MIS Report at 31 and 61; Appeal Record, Silvicultural Report at 4-8, 18-20, 42-44.

Appellant Statement #19: Appellant states that the "scale of ecological damage caused by the wide-scale fire suppression program that began almost 100 years ago wasn't recognized until after the Forest Plan was adopted in 1988." Appellant states that this "constitutes significant new information that did not result in any new forest plan decisions or direction, which itself may be adopted properly only as an amendment or revision of the Forest Plan, following proper NEPA procedures." AWR at 16.

Response: I find that the Responsible Official disclosed the effects of past fire suppression as it relates to the Power Lake project.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity.

The Colville LRMP was amended by Regional Forester's Forest Plan Amendment #2, referred to as the Eastside Screens. EA at 1. The Eastside Screens EA considered the effects of fire suppression, disclosing that the historic suppression of fire has permitted abnormally high densities of trees to accumulate, placing entire stands under high stress making them more vulnerable to the combined effects of drought, insects, and disease. The Eastside Screens EA also discloses that fires historically played a major role in the health of these forests, they were light, frequent ground fires rather than the hot, stand replacement fires which are likely to occur under present conditions. Eastside Screens EA at 13. A discussion of effects of Eastside Screens on wildfire is disclosed. Eastside Screens EA at 20-26.

See also response to Appellant Statement #18 for additional information.

Appellant Statement #20: Appellant states that the Power Lake project implements the direction in the 1988 CNF Forest Plan that continues to implement the scale of ongoing ecological damage disclosed under the "no-action" alternative for ICBEMP, but not disclosed in the Colville Forest Plan or its EIS, and that the Forest cannot legally implement this new direction from ICEBMP because the Forest Plan has

not been revised or amended to incorporate this new information. AWR at 17. In addition, appellant states that the Forest has not explained or disclosed the cumulative ecologic and economic costs and impacts and has not disclosed how much the Forest is "out of whack" in terms of "forest health" because of this past fire suppression. AWR at 18.

Response: I find that the Responsible Official adequately disclosed the effects of the Proposed Action and alternatives, including the effects of fire suppression. See response to Appellant Statement #18 for a discussion of effects of fire suppression.

Appellant Statement #21: Appellant states that the EA "doesn't provide a genuine discussion of the varying amounts and levels of effectiveness of fuel changes attributable to: the varying ages of the past cuts, the varying forest types, the varying slash treatments, etc.," and that this is true for land in other ownerships also. Appellant state that the EA "does not disclose how the vegetation patterns that have resulted from past logging and other management actions would influence future fire behavior." AWR at 18.

Response: I find that the Responsible Official adequately disclosed the effects of the proposed action and alternatives, including the effects of past logging and other management activities.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity.

The EA uses Fire Regime Condition Class (FRCC) to describe the degree of departure from the historic fire regimes that results from alterations of key ecosystem components such as composition, structural stage, stand age, and canopy closure. The EA further discloses that departures from historic fire regimes can be the result of fire exclusion, timber harvesting, grazing, introduction and establishment of nonnative plant species, insects or disease (introduced or native), or other past management activities. EA at 65-73; Appeal Record, Fire, Fuels & Air Quality Report at 7-8, 14-15, 19.

Past, present and reasonably foreseeable activities that could have affected FRCC are identified. EA Appendix E at E1-E8. Conditions on other lands not managed by the Forest Service are outside the scope of the analysis.

Historic Range of Variability

Appellant Statement #22: Appellant states that the EA and decision notice (DN) violate the National Forest Management Act (NFMA) due to violation of the Colville Forest Plan and the NFMA requirement to maintain wildlife species viability. AWR at 2. Specifically, appellant states that the proposed silvicultural activities in structural stage 7 conflict with the Eastside Screens which prohibit timber harvest in late and old structure (LOS) stages that are below the historic range of variability (HRV), thus violating the Forest Plan and NFMA. AWR at 3 and 4.

Response: I find the Responsible Official has complied with Forest Plan (Eastside Screens) direction to not harvest in late and old structural stage stands in biophysical environments that are below HRV for the project area.

Regional Forester's Forest Plan Amendment #2 (Eastside Screens) amended the Colville Forest Plan, applying interim wildlife standards that prohibit timber sale harvest in late and old structural (LOS)

forest stages when the amount of LOS in a particular biophysical environment is below the historical range of variability (HRV) within a particular watershed. Eastside Screens EA at 9-14.

The Responsible Official disclosed that within the Power Lake project area, structural stages 6 and 7 are both considered LOS and both occur within the project area. Structural Stage 6 is either within or above HRV in all but one biophysical environment and Structural Stage 7 is below HRV in three biophysical environments and does not occur in the others within the project area. Appeal Record, Silviculture Report at 10-17. EA at 51.

The EA discloses that harvest will occur in Structural Stage 6 where it is currently above HRV. No harvest appears to be planned in Structural Stage 7. EA at 56-57 and 60-61; Appeal Record, Silvicultural Report at 17. See also response to Appellant Statement #1 for further clarification.

Appellant Statement #23: Appellant states that Alternative B will fail to accomplish the restoration goal stated in the purpose and need because the EA does not demonstrate that either landscape-level attributes, such as pattern or stand-level attributes, such as composition and structure, "deviate significantly from any measure of resilience, leaving the DNs chosen treatments unjustified from a restoration perspective." AWR at 23.

Response: I find that the Responsible Official adequately disclosed the effects of the proposed action and alternatives, including how well the proposed action and alternatives meet the purpose and need.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity. The purpose and need section of the EA identifies restoration goals for the project area. EA at 1-4. DN at 10-12.

During project development, the Forest collaborated with the Northeast Washington Forestry Coalition (NEWFC) to design and implement restoration and fuels reduction projects. During the collaborative process, NEWFC suggested appropriate scale for assessment of restoration landscape condition and effects of the proposed action and alternatives. EA at 9-10, 12. The assessment of conditions and effects at the landscape scale is partially based on an analysis of the historical range of variability (HRV). The HRV for the structural stages on the Colville National Forest was developed by a team of specialists from the Colville and Okanogan National Forest and is based on pre-settlement conditions. DN Appendix A at A-43, A-51, A-63, A-65, A-69.

The effects of the proposed action and alternatives on landscape level characteristics are disclosed. EA at 47-55; Appeal Record, Silvicultural Report at 10-17

Appellant Statement #24: Appellant states that the for total area, the HRV discussion in the EA indicates a range of target metric for structural stages in various biophysical environments, but the EA contains no target metrics for patch size and patch configuration and has no display of the current patchwork of structure-cover types. AWR at 24 and 25. Appellant states that there is "no scientifically valid spatial or numerical analysis of Power Lake planning area landscape departure from historic conditions" and that there are no prescriptions that can defensibly meet the purpose and need. AWR at 28 and 29.

Response: I find that the Responsible Official adequately disclosed the effects of the proposed action and alternatives, including a scientifically valid numerical analysis of the project area landscape.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity. An analysis of landscape departure from HRV is disclosed, indicating which structural stages are within, above, or below HRV for each biophysical environment within the project area. Appeal Record, Silvicultural Report at 16. See response to Appellant Statement #23 for further discussion of effects related to HRV analysis.

Appellant Statement #25: Appellant states that the EA does not have an adequate analysis that shows how constructing roads and logging is necessary to maintain the health of the forest and that the project would likely result in unintended consequences with unknown landscape temporal and spatial cumulative effects to natural ecosystem processes. AWR at 29 and 30.

Response: I find that the Responsible Official adequately disclosed the effects of proposed activities, including roads and logging.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity. Various activities, including road construction, road decommissioning, and timber harvest were developed to meet the purpose and need of the project and those activities are described. DN at 2-4; EA at 6-8, 14-18, 21-23.

The direct, indirect, and cumulative effects of the proposed action and alternatives, including how well they meet HRV are described in the EA at 55-65, 67-73, 78-83, 87-103, 104-109, 110-113, 114-116, 117-122, 123-126, 127-130, 131-133, 134-135, 136-142. The Responsible Official described her rationale for selection of the actions to be implemented and demonstrated a reasoned choice among alternatives. DN at 2, 13-14.

Appellant Statement #26: Appellant states that the EA is biased toward logging by omitting parts of citations used as references in the analysis of HRV. AWR at 33.

Response: I find that the Responsible Official adequately disclosed the effects of the Proposed Action and alternatives, including no action.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity.

The direct, indirect, and cumulative effects of the proposed action and alternatives, including how well they meet HRV are described. The EA describes the effects of no action as well as the effects of the proposed action and alternatives without preference for any alternative. EA at 55-65, 67-73, 78-83, 87-103, 104-109, 110-113, 114-116, 117-122, 123-126, 127-130, 131-133, 134-135, 136-142.

Appellant Statement #27: Appellant states that the EA doesn't cite data comparing fuel conditions in stands or within the planning area, or compare them to any metric of HRV. AWR at 33.

Response: I find that the Responsible Official appropriately disclosed fuels conditions for the Power Lake Project. In addition, she compared the current fuels loads to the Fire Regime Condition Class (FRCC) metric.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity.

The acres of fire regime and Fire Regime Condition Class (FRCC) are displayed in Table 6 within the EA. EA at 65 and 66. Fire regimes (expected fire frequency and severity) and FRCC are characterized by fuel tonnage and Plant Association Group (PAG). In addition, fuel model classification also provides additional clarification on potential fuels loads in the Power Lake Project. EA at 65-73.

Soils

Appellant Statement #28: Appellant states that the "EA and DN fail to disclose and consider the cumulative effects of past, current, and foreseeable actions on soil productivity in affected watersheds, in violation of NEPA and NFMA." AWR at 33.

Response: I find the Responsible Official followed NEPA and NFMA in the Power Lake Project's cumulative effects section.

The regulation at 36 CFR 220.7(b)(3)(i) directs an EA to briefly provide sufficient evidence and analysis, including the environmental impacts of the proposed action and alternative(s), to determine whether to prepare either an EIS or a FONSI. The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

The regulatory framework for maintaining soil productivity is provided by the Multiple-Use Sustained Yield Act of 1960 which directs the Forest Service to achieve and maintain outputs for various renewable resources in perpetuity without permanent impairment to the land's productivity. Appeal Record, Soil Report at 12. The National Forest Management Act (NFMA) of 1976 requires the Forest Service to safeguard the land's productivity. The implementing regulations for Forest Planning that followed NFMA require the Forest Service to measure effects of prescriptions, including "significant changes in land productivity." Soil Report at 12. To comply with NFMA, the Chief of the Forest Service charged each Region with development of soil quality standards for detecting a loss in long-term productivity potential.

The Region 6 soil quality standards are located in the Forest Service Manual at 2520-98-1. Recognizing that many forest activities impact soil productivity (e.g. road construction, landings, rock pits, etc.), the Forest Service policy is to limit the extent of these detrimental impacts. The Pacific Northwest Region emphasizes protection over restoration (Forest Service Manual 2500, Watershed and Air Management, R6 Supplement, 2500-98-1).

Cumulative effects on soil productivity are covered in detail throughout the EA and soils report. Consistency with the Forest Plan, Management Direction, and other Laws, Regulations and policies is stated in the Decision Notice. DN at 15; DN Appendix A at A-8, A-11, A-12, A-47, A-48 and A-73; EA at 26, 27, 29 32, and 34, 74, 117 to 122. Implementation of the Power Lake Project design requirements are listed in Chapter 2. Alternative B (the proposed action) would meet Forest Plan standards for soil productivity by following these design requirements. EA at 117-122. The Soils Report at 12 outlines design criteria that will be followed to minimize impacts on soils, which reduces any potential for cumulative effects to occur. The Soils Report also discloses the applicable soil standards from the Colville National Forest Land and Resource Management Plan, which discusses the effects of timber harvest on soil productivity (pages IV-5 through IV-10). Soil Report at 12.

Further evidence that supports the conclusion that there would be no cumulative effects is found in the soils report. Field verification was conducted by the project soil scientist, indicating a high level of unit by unit analysis as to existing conditions. Seventy-five percent of the proposed commercial timber harvest units were visited during the summer of 2009-2011. Soil Report at 13. Detrimental soil condition data was collected in 52 units. All past, present and future actions with the potential to adversely affect soils, along with practices to minimize adverse effects are disclosed in the soils report at 14-24. The analysis processes and assumptions for the effects analysis are displayed in the Soils Report at 25-28.

Appellant Statement #29: Appellant states that the Forest has never taken objective, scientifically sound measurements of what the soil produces (grows) following management activities and that the Forest's soil proxy (detrimental soil conditions) is arbitrary and has no scientific basis. AWR at 36.

Response: I find that the Forest presented adequate analysis and data to determine how soil productivity has been affected over time and that the analysis of detrimental soil conditions are founded in the Forest Plan.

To conduct harvest operations on forested ground, a designated harvest network of roads, landings and main skid trails is needed for access. The effects of ground based harvest operations have been well documented in the literature both in forestry and field agriculture. See Appeal Record, Soils Report; Appendix D, Literature Cited at 42-46 which cites many scientific studies documenting the effect of logging operations on soil productivity. The forest soil scientist who collected most of the site specific data on approximately 75 percent of the proposed treatment units has over thirty years of monitoring logging effects on soils. Field verification included collection of detrimental soil condition data on 52 units using point and/or transect data.

The Colville LRMP and regional soil guidelines set forth how analysis of detrimental soil conditions adequately displays impacts to soils. See response to Appellant Statement #28 for further information on site specific soil conditions that were analyzed.

Appellant Statement #30: Appellant states that the EA does not disclose the Forest Plan or regional soil standards, or demonstrate consistency with these standards. AWR at 37.

Response: I find that the Responsible Official appropriately disclosed Forest Plan and regional soil standard in the Power Lake Project EA and DN.

The regulations at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity. For detailed information of where this information was disclosed, see response to Statement #28 above.

Appellant Statement #31: Appellant states that the EA and soil report fail to disclose how increases in bulk density were measured for previously logged units, which leaves the methodology in question. AWR at 37. Appellant states that obvious detrimental soil damage and total cumulative soil damage was not quantified in some areas. AWR at 37.

Response: I find that the EA and soil report adequately disclose how the project complies with Forest Plan standards and that detrimental soil conditions were adequately disclosed.

The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately. Field verification of soil disturbance classes was conducted, largely by soil scientist Nancy Glines with over 30 years of disturbance monitoring experience. Seventy five percent of the proposed treatment units were field verified (Appeal Record, Soils Report at 13) with transecting or random point monitoring as specified in Page-Dumroese, Deborah S.; Abbot, Ann M.; Rice, Thomas M. 2009. Forest Soil Disturbance Monitoring Protocol: Volume II: Supplementary methods, statistics, and data collection. Gen. Tech. Interp. WO-GTR-82b. Washington, DC: U.S. Department of Agriculture, Forest Service. 64 p.; Soils Report at D. Literature Cited at p.44.

Some extrapolation of disturbance interpretations is to be expected, especially where the project soil scientist had over 30 years of experience total and 20 years in the project area. Other methods of evaluation, such as aerial photo interpretations and old harvest records were used to evaluate conditions on the remaining units. Extrapolation is an accepted technique especially with highly experienced professional soil scientists. See DN, Appendix A, Response to Public Comments, Comment 151 at A-73 where various courts have determined that there is no requirement to look at 100% of treatment units.

Appellant Statement #32: Appellant states that the EA fails to disclose the aerial extent of detrimental disturbance in areas outside of Power Lake project activity areas, which means that cumulative effects were not addressed. AWR at 38.

Response: I find that the EA adequately discloses the effects to soils with regards to cumulative effects.

The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately. The National Forest System lands within the project planning area are the analysis area for this resource. Degraded soil productivity conditions of adjacent lands do not materially affect productivity on NFS lands. Soil impacts are generally analyzed for each timber sale unit or prescribed burning unit (FSM 2520 R6 Supplement 2500-98-1). EA at 117.

Appellant Statement #33: Appellant states that the EA does not obliterate and restore all existing unauthorized routes. Appellant states that the EA doesn't acknowledge the extent of the damage from motorized vehicle use in the project area, or include design features to restore the soil productivity on all damaged areas in the project. AWR at 40.

Response: I find that the EA adequately analyzed past disturbances from motor vehicle use and included adequate design features to restore soil productivity.

The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately. The Transportation Report for this project accounts for the majority of roads in this planning area. Appeal Record, Transportation Report at 1-5. The Power Lake Planning Area contains a number of unauthorized roads which were not intended to be part of nor managed as part of the forest transportation system. These are primarily abandoned logging roads, skid trails and/or user created off highway vehicle routs. Approximately 8 miles of these roads were identified through field and photo investigation. EA at 123. Road decommissioning is proposed on approximately 20.7 miles of existing system roads.

Under Alternative B, approximately 20.7 miles of system roads are proposed for decommissioning, all with operational and objective maintenance levels of 1, except road 4370020, which has a portion that is operational maintenance level 2. Some of the road templates may be used during harvest activities and then decommissioned. As per Forest Service Manual (FSM) 7734.1, decommissioning includes applying various treatments, including one or more of the following:

- Reestablishing former drainage patterns, stabilizing slopes, and restoring vegetation;
- Blocking the entrance to a road or installing water bars;
- Removing culverts, reestablishing drainages, removing unstable fills, pulling back road shoulders, and scattering slash on the roadbed;
- Completely eliminating the roadbed by restoring natural contours and slopes; and
- Other methods designed to meet the specific conditions associated with the unneeded road.

The methods for decommissioning are dependent on resource needs and associated risk, as well as available funding. Decommissioned roads are changed in the Forest Road Atlas (Infra Travel Routes database) from "existing" to "decommissioned" and are tracked and monitored for the effectiveness of decommissioning efforts. Estimated decommissioning costs are $63,000 ($3,000/mile). See table 7 which displays the roads, or segments of, that were identified for decommissioning. Appeal Record, Transportation Report at 12.

The proposal would construct about 0.3 miles of new specified roads impacting productivity on about 2 acres. The proposal would construct about 12.8 miles of temporary roads. About 2.2 miles would be reconstruction of an existing unauthorized road, and about 10.6 miles would be new construction, impacting soil productivity on about 32 acres. The proposal is expected to construct 240 new landings impacting about 60 acres. Appeal Record, Soils Report at 29. Project design features include decommissioning temporary roads and rehabilitating landings. EA at 27-36.

Appellant Statement #34: Appellant states that the EAs mitigation methods that are relied on have not been demonstrated to be effective in restoring soils to meet soil quality standards or for preventing new detrimental soil damage. AWR at 40.

Response: I find that the mitigation methods described in the EA have been used by the Forest in the past and have effectively restored soil productivity.

The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately.

To conduct harvest operations on forested ground, a designated harvest network of roads, landings and main skid trails is needed for access. This harvest framework will continue to have less production potential than the surrounding timber stands. Each successive ground based harvest entry will be largely confined to existing roads, landings and main skid trails with the exceptions being cut-to-length harvesting in the presence of adequate slash matting or adequate winter logging conditions. This will help keep the net disturbance, by treatment unit, within the Regional Standards for detrimental soil disturbance.

Project design criteria include restoration of landings and temporary roads. EA at 27-36. The goal of these criteria is to restore some soil productivity to landings and temporary roads. After reuse of an area, the impacted area is to be scarified to a depth of at least 6 inches, and seeded. If reuse of the impacted area is unlikely, subsoiling is done in consultation with the soil scientist and trees or shrubs are seeded or planted. If a landing is to be turned into a dispersed campsite, restoration treatments should aim to reduce potential erosion and restore grasses and forbs, while maintaining a suitable camping area.

Temporary roads must be decommissioned at the conclusion of the authorizing activity (FSM 7703.24). Decommissioning includes reestablishing vegetation and, if necessary, initiating restoration of ecological processes interrupted or adversely impacted by the unneeded road. Decommissioning includes applying various treatments, including one or more of the following:

- Reestablishing former drainage patterns, stabilizing slopes, and restoring vegetation;
- Blocking the entrance to a road or installing water bars;
- Removing culverts, reestablishing drainages, removing unstable fills, pulling back road shoulders, and scattering slash on the roadbed;
- Completely eliminating the roadbed by restoring natural contours and slopes; and
- Other methods designed to meet the specific conditions associated with the unneeded road. (FSM 7734.1)

Scarifying enhances the restoration of shallow-rooted vegetative cover such as grasses, herbs and some hardy shrubs. Deeper subsoiling reduces deeper compaction allowing deeper root penetration in order to initiate restoration of ecological processes for deeper rooted vegetation (trees) and water movement. Effectiveness: Scarifying is widely done and highly effective for grasses. Subsoiling generally reduces deeper compaction, but does not completely eliminate it nor does it completely restore infiltration (Luce 2002). Appeal Record, Soil Report at 15.

Decommissioning and scarifying applies to all landings and temporary roads. Appeal Record, Soil Report at.14. Thus, for the Power Lake project, the main tractor and cut-to-length trails are likely to remain compacted and will continue to be considered as in a detrimental soil condition, while areas of very light tractor skidding (single pass, over slash, dry conditions), or light cut-to-length use (1 to 3 passes, over very good slash bed) are expected to decompact over a period of 30-50 years. Appeal Record, Soil Report at 33.

Appellant Statement #35: Appellant states that the Forest does not have enough soil bulk density or compaction monitoring data collected at adequate depths and on enough sites to be able to make accurate predictions about the effects of soil compaction in the project area. AWR at 40.

Response: I find that the Forest had adequate information to determine effects to soils from project activities.

The regulation at 36 CFR 220.7(b)(3)(iv) states that an EA may discuss the direct, indirect, and cumulative impact(s) of the proposed action and any alternatives together in a comparative description or describe the impacts of each alternative separately. The Colville National Forest and Regional Soils Standards (FSM 2520 R6 Supplement 2500-98-1; stated within EA at 117) were developed based on decades of experience in monitoring soil compaction throughout the Forest and Region 6. Researchers such as Henry Froelich, J. Michael Geist, Paul Adams and many others have documented the effects of ground based timber operations on many different soils throughout Region 6 (Oregon and Washington).

Lab data has been generated and analyzed for many of the soils throughout this area allowing soil scientists to make fairly accurate predictions as to soil responses to compaction and to develop soil compaction hazard ratings. Appeal Record, Soils Report, Literature Cited at 42-46.

Appellant Statement #36: Appellant states that the Forest failed to adequately address the spread of noxious weeds, which have the potential effect of reducing site productivity by replacing natural vegetation and competing for the same soil nutrients and moisture. AWR at 41.

Response: I find the Responsible Official effectively analyzed the impacts of noxious weeds from proposed project activities within the Power Lake Project. This project is consistent with applicable federal regulations, the Colville LRMP and BMPs and Forest weed prevention guidelines.

The regulation at 36 CFR 220.7(b)(3)(iii) directs the agency to describe the effects of the proposed action and any alternatives in terms of context and intensity. See also USDA Memo 2080 Colville National Forest Weed Prevention Guidelines (1999), Colville LRMP 4-50 and USDA Best Management Practices (1988) for direction.

The Power Lake EA describes in detail the impacts of noxious weeds and disclosed appropriate design criteria to limit the spread of noxious weed impacts within the planning area. EA at 109 to 113. The analysis acknowledged the existing condition and the problematic spread of noxious weeds from surrounding lands that are not under Forest Service administration and the effects of all action alternatives.

Table 15 (EA at 109) displays five noxious weed species that are considered to be Class C invasive species. These species are already widespread across the state and control is encouraged in areas of large infestations. The remaining noxious weeds in the planning area are Class B non-designate species. Control of these weeds by the Washington State Noxious Weed Control Board requires treatment of Class B non-designate in vehicle corridors and in areas of limited distribution. The Power Lake EA effectively discloses project design criteria to limit noxious weed impacts within the planning area. EA at 26 and 32 to 33.

Appellant Statement #37: Appellant states that the Forest has "no idea how the productivity of the land been affected in the Cedar-Thom Project area and forestwide due to noxious weed infestations, nor how that situation is expected to change." AWR at 41.

Response: I find that the Forest could not and is not required to know how the productivity of the land has been affected in the Cedar-Thom project area by noxious weeds. A review of the Forest's schedule of proposed actions and past projects found that the Cedar-Thom project does not appear to be a Colville Forest project. As such, the Forest is not required to determine how this project affects productivity or how the noxious weed situation may or may not change.

Appellant Statement #38: Appellant states that it would be irresponsible for the Forest to never factor in logging-induced losses in productivity, leading to potentially serious reductions over time in expected timber yields. AWR at 41.

Response: I find the decision by the Responsible Official appropriately considered past actions such as logging to assess effects on project detrimental soil condition (DSC), and met regulatory and Forest Plan direction for DSC.

The regulatory framework for maintaining soil productivity is provided by the Multiple-Use Sustained Yield Act of 1960, which directs the Forest Service to achieve and maintain outputs of various renewable resources in perpetuity without permanent impairment of the land's productivity. The National Forest Management Act of 1976 (NFMA) requires the Forest Service to safeguard the land's productivity. The implementing regulations for Forest Planning that followed NFMA require the Forest Service to measure effects of prescriptions, including "significant changes in land productivity." To comply with NFMA, the Chief of the Forest Service charged each Region with development of soil quality standards for detecting soil disturbances indicating a loss in long-term productivity potential.

For Region 6 these soil quality standards are located in the Forest Service Manual at 2520, R6 Supplement 2500-98-1. Recognizing that many forest activities impact soil productivity (e.g., road construction, landings, rock pits, etc.), the Forest Service policy is to limit the extent of these detrimental impacts. The Pacific Northwest Regional policy emphasizes protection over restoration (Forest Service Manual 2500, Watershed and Air Management, R6 Supplement 2500-98-1). The Colville National Forest LRMP also discusses the effects of timber harvest on soil productivity (pages IV-5 through IV-10 and provides for additional standards. Colville LRMP at 4-50.

The soils scientist did assess past activities, including logging, in determining the effects of past activities on soil productivity. In order to ascertain how past and on-going activities have impacted the soil, data was gathered using both random point (Page-Dumroese, Abbott and Rice 2009) and transects (Soils report at 10). Table 6 summarizes the logging history of this planning area by decade and the existing detrimental soil conditions. Appeal Record, Soils Report at 10. The primary detrimental soil condition encountered from past logging activity was compaction on old skid trails and roads. Appeal Record, Soils Report at 10.

The project soils scientist factored in effects of past activity on detrimental soil condition and determined the project is consistent with the soil management guidelines described in FSM 2552 (Soils report at 41, and with design criteria, that the proposed action would meet the Forest Plan standards for soil productivity. Appeal Record, Soils Report at 41. See also response to Appellant Statement #39 for additional documentation.

Appellant Statement #39: Appellant concludes by stating that the Forest "must quantify how much soil has been permanently impaired within the project area and forestwide, to determine if the principle of "sustained yield" is being applied, and to demonstrate consistency with NFMA's prohibitions on causing permanent impairment of soil productivity." AWR at 42.

Response: I find the Responsible Official met regulatory and Forest Plan direction in maintaining soil productivity and that the project will not cause permanent impairment to soil productivity.

The regulatory framework for maintaining soil productivity is provided by the Multiple-Use Sustained Yield Act of 1960, which directs the Forest Service to achieve and maintain outputs of various renewable resources in perpetuity without permanent impairment of the land's productivity. The National Forest Management Act of 1976 (NFMA) requires the Forest Service to safeguard the land's productivity. The implementing regulations for Forest Planning that followed NFMA require the Forest Service to measure

effects of prescriptions, including "significant changes in land productivity." To comply with NFMA, the Chief of the Forest Service charged each Region with development of soil quality standards for detecting soil disturbances indicating a loss in long-term productivity potential.

For Region 6 these soil quality standards are located in the Forest Service Manual at 2520, R6 Supplement 2500-98-1. Recognizing that many forest activities impact soil productivity (e.g., road construction, landings, rock pits, etc.), the Forest Service policy is to limit the extent of these detrimental impacts. The Pacific Northwest Regional policy emphasizes protection over restoration (Forest Service Manual 2500, Watershed and Air Management, R6 Supplement 2500-9-1).

The Colville National Forest Land and Resource Management Plan also discusses the effects of timber harvest on soil productivity (pages IV-5 through IV-10) and provides additional soil standards. Colville LRMP at 4-50.

The Forest Service Manual direction and Colville Forest Plan standards are designed to maintain or improve current soil productivity. The project soil scientist determined the project is consistent with the soil management standards described in FSM 2552. The source of the soil data is identified (Soils Report at 1); the method of investigation is described (Soils report at 1 and 14); a soil map is included as appendix material; soil characteristics, soil interpretations, and soil classification are described (Soils report at 4-8); conservation practices are included (Soils report at. 15-25); and environmental effects are described (Soils report at 26-39). The soils scientist also found that with design criteria, the proposed action would meet the Forest Plan standards for soil productivity. Appeal Record, Soils Report at 41.

Response to Comments

Appellant Statement #40: Appellant states that the Responsible Official did not reply to the opposing viewpoints submitted by him. DA at 1. Specifically, appellant states that the Responsible Official did not respond to his opposing views or major points of view related to the environmental impacts of the alternatives, including the proposed action. DA at 1. Appellant states that not responding to an opposing view is an option only if the Responsible Official can show why the opposing view is not responsible. DA at 1.

Response: I find that the Responsible Official adequately considered appellant's comments and opposing viewpoints that were submitted.

The regulation at 36 CFR 215.6(b)(1) states that the Responsible Official shall consider all substantive written and oral comments submitted in compliance with the regulatory requirements. All written comments received shall be placed in the project file and shall become a matter of public record. 36 CFR 215.6(b)(2).

The Forest prepared an appendix to the Decision Notice (DN) that documented the Responsible Official's consideration of all comments received on the EA and in particular, appellant's comments. DN Appendix A at A-1 to A-86. As documented in Appendix A, the Forest clearly states that the attachments were considered by the Responsible Official. Many of the attachments submitted by appellant include concepts that are commonly understood by the specialists on the interdisciplinary (ID) team. The Responsible Official did not "reject" the science presented; instead, she distinguished between pieces that were 'opinions' versus pieces that were considered to be scientific literature. DN Appendix A at A-1 to A-86.

With regards to the information submitted by appellant that were viewpoints that did not agree with the project, the no action alternative fully responds to this viewpoint and was considered in detail. EA at 14 to 17.

Range of Alternatives/Purpose and Need

Appellant Statement #41: Appellant states that "the EA contains an overly narrow statement of purpose & need that renders ALL alternatives that do not harvest trees nonresponsive to the P&N and ineligible to be analyzed in detail." DA at 2 and 3.

Response: I find that the Power Lake Project EA provides a sufficient purpose and need statement that the agency has responded to with a proposed action and no action alternative that adequately addresses the environmental concerns. Further, no additional alternatives are needed to address the public concerns identified during scoping or the public comment period for this project. Thus, the Responsible Official has met the intent of NEPA when developing a purpose and need statement and a reasonable range of alternatives.

In an EA, Federal agencies must briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action. 36 CFR 220.7(b)(1). In the Power Lake Project EA, the Responsible Official determined that one of the project's underlying purposes is to keep forests healthy and productive to sustainably provide forest products now and in the future. EA at 4 to 5. In addition, the need for improving water quality and fish habitat along with maintaining healthy herds of big game animals where two more purposes and needs for the Powers Lake Project. EA at 2 to 5.

This purpose and need for the project fully responds to Land and Resource Management Plan (LRMP) direction regarding timber output (Colville LRMP, 1988 at 2-13 to 2-16 and 4-14 to 4-26). Therefore, the Responsible Official was consistent with plan direction when proposing the Powers Lake Project to provide commercial timber for local communities and the forest products industry.

The no action alternative does not propose timber harvest and was analyzed in detailed study, thus responding to appellant's concerns over not harvesting trees. EA at 14 to 17.

Appellant Statement #42: Appellant states that the purpose and need has been written such that only an alternative that harvests timber is responsive to the purpose and need. DA at 2. Appellant states that "not only does the EA violate 40 CFR 1506.6 but it is inconsistent with the court precedent set in the following cases: Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664 (7th Cir. 1997); Muckelshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, fn. 7 (9th Cir. 1999); Methow Valley Citizens Council v. Regional Forester, 833 F.2d 810, 815, rev'd in Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 195-96 (D.C.Cir.1991); Citizens Against Toxic Sprays v. Bergland, 428 F. Supp. 908. 933 (D. Or. 1977); Town of Matthews v. United States Dept of Transp., 527 F. Supp. 1055, 1058 (W.D.N.C. 1981); National Parks & Conservation Association v. Kaiser Eagle Mountain, Inc., 05-56814 (9th Cir. Nov. 10, 2009). DA at 2. Based on the above, appellant states that the "purpose and need for the EA 1) is inconsistent with court precedent, 2) violates 40 CFR 1506.6, and 3) violates Executive Order 13274." DA at 2.

Response: I find that the Responsible Official provided adequate notice in accordance with 40 CFR 1506.6 and identified appropriate key issues for inclusion in the analysis of environmental effects for

each alternative analyzed in detail. The basis for this decision was appropriate given the cause and effect relationships associated with each type of action that could result in potential conflicts. Key issues were also adequately used in the development of alternatives to the proposed action that were considered, but eliminated from detailed study.

As part of the scoping process, Federal agencies must invite participation of affected or other interested persons and the Responsible Official determines the scope and significant issues to be analyzed. 40 CFR 1501.7(a); 36 CFR 220.4(e). The methods and degree of the scoping effort undertaken for a given project vary depending on the scope and complexity of the project. Scoping shall be carried out in accordance with the requirements of 40 CFR 1501.7. Because the nature and complexity of a proposed action determine the scope and intensity of analysis, no single scoping technique is required or prescribed. 36 CFR 220.4(e)(2). Issues should be phrased as a cause-effect statement relating actions under consideration to effects. An issue statement should describe a specific action and the environmental effect(s) expected to result from that action. Cause-effect statements provide a way to understand and focus on the issues relevant to a particular decision. Forest Service Handbook (FSH) 1909.15, 12.4.

The Responsible Official provided for scoping on the project proposal by publishing a news release in the Newport Miner (June 1, 2011) and mailing a letter to interested publics describing the proposed action (March 14th, 2011). EA at 8. In addition, there were several public meetings at the Newport Ranger District and around the planning area, including a public meeting at the Kalispel Tribe of Indians' Camas Wellness Center. EA at 8. Public attendees, including Kalispel Tribal representatives and the Northeast Washington Forestry Coalition, and ID team members visited and discussed the proposed actions and potential issues or concerns. EA at 8 to 12. Decision Notice (DN) at 9.

From these scoping efforts, issues were identified by the ID Team or through public comments received during the above-mentioned scoping period. The ID team recommended and the Responsible Official acknowledged resource issues for analysis based on cause and effect relationships associated with the project proposal. EA at 8 to 13; DN at 13. Thus, the Responsible Official used a systematic, interdisciplinary approach to ensure integrated application of issues identified by the interested public, as well as the ID Team. This approach fulfills the statutory requirements of the NEPA by addressing the natural and social sciences in decision making that affects the human environment. 42 U.S.C. 4332(2)(A).

In accordance with 36 CFR 220.7(b)(2)(iii), the concerns that were identified were then used to develop project design features such as wood retention, use of skips and gaps for thinning, and by using existing skid trails and landings. EA at 25 to 40. Other issues are included in order to provide disclosure in Chapter 3 of the environmental assessment so that the Responsible Official can make an informed decision. EA at 56 to 60.

In addition, the EA documents consideration of two alternatives that were considered, but eliminated from detailed study. The first alternative included all acres and activities in the planning area that would have a silviculture benefit to the area's natural resources, treating approximately 14,700 acres. This alternative was eliminated from detailed study because of the high amount of roads that would be needed and potential concerns it presented. EA at 13. The second alternative considered only non-commercial activities like relocating the Middle Fork Calispell Creek road. This alternative was eliminated from detailed study because the activities of this alternative would not meet the purpose and need. EA at 13 to 14.

Wildfire Damage Risk Reduction

Appellant Statement #43: Appellant states that the responsible official ignored the most effective wildfire damage risk-reduction methods as identified by Dr. Jack Cohen. DA at 2 and 3. Appellant states that neglecting to mention or analyze an alternative based on Dr. Cohen's recommendations violates 40 CFR 1500.2(f). DA at 3. In addition, appellant states that the responsible official did not consider action to "assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings" in violation of Section 101(b)(2) of the NEPA. DA at 3.

Response: I find that the Responsible Official thoroughly addresses Dr. Cohen's research and incorporates it within the Powers Lake EA document. Most notably, the analysis in which the Responding Official used for her decision gathered and utilized all practical means of information which minimized and avoided possibly adverse effects upon the quality of our human environment. According to 40 CFR 1500.2, Federal agencies need to gather and utilized all practical means of information to restore and enhance the quality of our human environment. In doing so, these agencies need to minimize or avoid any possible adverse effects upon the quality of the human environment. Federal agencies, in addition, need to assure the American public's surroundings are safe, healthful, productive, and aesthetically and culturally pleasing. NEPA Section 101(b)(2).

The Powers Lake EA gave a detailed look at relevant resources within the effects analysis sections of the document. EA at 145 to 144. The document's literature cited section contains recent and copious amounts of scientific evidence supporting their professional conclusions. EA at 147 to 154. The Powers Lake DN addresses, within the response to comments, questions about utilizing Dr. Cohen's research. DN Appendix A at A-17 to A-19. Here, the document goes into detail about where and how this particular research, among many others, was utilized. In addition, Dr. Cohen's research was addressed in the Cumulative Effects section of the Powers Lake EA. EA at 73. Here the document addresses what portions of this particular research are within the scope of the project and how it is utilized in the analysis.

Mitigation and Monitoring

Appellant Statement #44: Appellant states that the EA is inconsistent with CEQ mitigation guidance. DA at 3. Appellant states that both he and the public "have the expectation that the Responsible Official will comply with this guidance." Appellant states that "absent such guidance compliance the public expects the Responsible Official to explain why this project is so unique that following the CEQ guidance is voluntary" and that "without information showing the public the mitigation was effective under similar conditions in the past the public does not know if or how the mitigation will reduce the adverse environmental impacts." DA at 3.

Response: I find that the Responsible Official appropriately disclosed and analyzed mitigation measures as Project Design Requirements, including their effectiveness in the EA and incorporated all applicable mitigation measures into the DN. Therefore, the Responsible Official did comply with CEQ regulatory guidance regarding mitigation for project effects.

Federal agencies must include appropriate mitigation measures not already included in the proposed action or alternatives. 40 CFR 1502.14(f). In addition, mitigation and other conditions established in the NEPA document and committed as part of the decision shall be implemented by the lead agency. 40 CFR 1505.3.

The Powers Lake EA incorporated all known mitigation measures as Project Design Requirements, Management Requirements, and Best Management Practices into the design of the project proposal. EA at 25 to 40, EA Appendix D, DN at 2, and DN Appendix C. In general, Project Design Requirements (i.e. mitigation measures) were analyzed in their respective resource areas effects discussion within Chapter 3. EA at 45 to 145. No additional mitigation measures were brought forward during the scoping process or during comment on the EA. Therefore, the mitigation measures included for review and analysis in the EA were created by the Forest Service ID Team and incorporated directly into the project design. The DN incorporates these mitigation measures as Project Design Requirements/Criteria for implementation. DN Appendix C at C-1.

Appellant Statement #45: Appellant states that "this EA does not offer the public any information assuring them that the resources are available to perform the mitigation." DA at 4. Appellant further states that "the EA does not "carefully specif[y]" measurable performance standards or expected results of mitigation application so as to establish clear performance expectations." DA at 4.

Response: I find that the Responsible Official did consider measurable performance standards and expectations when creating Project Design Requirements/Criteria that will be capable of monitoring effectiveness during implementation. In addition, the Responsible Official is committed to implementation of these mitigation measures as noted in the Decision Notice and the agency has the requisite skill and resources to implement such measures as noted by past project actions on the Colville National Forest.

Agencies shall adopt procedures to ensure that decisions are made in accordance with the policies and purposes of the Act. 40 CFR 1505.1. Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. The lead agency shall upon request, make available to the public the results of relevant monitoring. 40 CFR 1505.3.

Given the specificity of the protection measures, the analysis of the environmental impacts with these measures in place, and the provision for ongoing monitoring to ensure compliance, the Responsible Official has taken the requisite "hard look" at the project's environmental consequences, and it was not arbitrary and capricious for her to determine that the impacts would not be significant with these mitigation measures in place. EA at 25 to 42 and 45 to 145. Monitoring of mitigation efficacy is discretionary; however, the Responsible Official is committed to monitoring by incorporation of the specific measurable Project Design Requirement/Criteria contained in the EA. EA at 40 to 42 and DN at 6 to 7.

Appellant Statement #46: Appellant states that "the EA does not explain the mitigation monitoring process for the public. Neither does it tell the public how they might receive a mitigation monitoring report specific to the mitigation effectiveness on this project." DA at 4.

Response: I find that the Powers Lake Project EA provides adequate details regarding the mitigation monitoring process for the public, which allowed the public a sufficient and meaningful opportunity to comment on the implementation of mitigation measures and monitoring plan components. Further, I find that the Responsible Official has fulfilled his duty to inform the public of where they can obtain information regarding this project, which includes any reports created regarding mitigation effectiveness.

Federal agencies must include appropriate mitigation measures not already included in the proposed action or alternatives. 40 CFR 1502.14(f). In addition, mitigation and other conditions established in the NEPA document and committed as part of the decision shall be implemented by the lead agency. 40 CFR 1505.3. Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases. The lead agency shall upon request, make available to the public the results of relevant monitoring. 40 CFR 1505.3.

The Powers Lake Project EA provides a list of project design criteria and mitigation measures by affected resources. EA at 25 to 40. This section also notes specific BMPs that are being implemented (see EA at 31 for example). For this project, the Responsible Official is committed to monitoring by incorporation of the specific measurable Project Design Requirement/Criteria and monitoring contained in the EA in his decision. DN at 6 to 7. The EA, as well as the DN provides contact information to obtain additional material in the administrative record for this project. EA at 1 and DN at 21. Thus, interested public have been provided sufficient details of the mitigation and monitoring plan to provide meaningful comments during the 30-day comment period and given sufficient notification on how to obtain additional information on any future data compiled for this project.

Appellant Statement #47: Appellant states that the "EA does not mention that "enforcement clauses, including penalty clauses" have been developed to assure purchaser mitigation measure compliance and where such enforcement and penalty clauses can be found." DA at 4.

Response: I find that the Responsible Official has met his responsibilities pursuant to NEPA regarding the development of specific mitigation measures that can be implemented during contract drafting, sale, and administration of timber operations for the Powers Lake Project decision. Further, I find it is premature for the Responsible Official to create contract provisions for mitigation of project effects until the Forest Service has identified units for a given commercial harvest.

Mitigation and other conditions established in the environmental impact statement or during its review and committed as part of the decision shall be implemented by the lead agency or another appropriate consenting agency. The lead agency shall include appropriate conditions in grants, permits or other approvals. 40 CFR 1505.3.

The appropriate time to draft contract provisions for mitigation measure implementation is prior to sale offerings of identified units for commercial harvest. At this point in the administrative process, it is premature to have completed these timber sale contract provisions. Once a decision has been made, a timber sale contract is put together regarding the specific units, roads, and locations of the sale. The timber sale contract includes numerous provisions regarding enforcement and penalties. Specifically, provision B9.0 requires a purchaser to put forth a performance bond that is used to guarantee "the faithful performance of the provisions of this contract." Furthermore, provision B9.3 specifies breach of contract and includes a discussion of penalties for breach, which can include suspension or termination of the contract. Claims against the performance bond can be filed by the Forest Service to complete any work that a purchaser fails to complete under the contract, thus ensuring that work (such as erosion control) is completed in a timely manner. See form FS-2400-3T. Thus, I find that the Responsible Official has met his regulatory responsibilities pursuant to CEQ guidance regarding implementation of mitigation measures.

Appellant Statement #48: Appellant states that "the Power Lake project is inconsistent with the CEQ NEPA Mitigation Guidance. The Responsible Official does not offer the public an explanation for why she

chose not to comply with the CEQ mitigation guidance. This omission of mitigation effectiveness information from the EA: "does not provide the public with an accurate analysis" which violates [40 CFR 40 CFR 1500.1(b)]; "diminishes the "professional integrity, including scientific integrity of the discussions and analyses" in the EA which violates (40 CFR 1502.24)." DA at 4 and 5.

Response: I find that the Responsible Official appropriately analyzed mitigation measures as Project Design Requirement/Criteria, including their effectiveness in the EA and incorporated all applicable mitigation measures into the DN. In addition, the Responsible Official provided a complete list of literature relied upon to analyze potential mitigation effectiveness and referenced scientific sources. Therefore, the Responsible Official did comply with CEQ regulatory guidance regarding mitigation for project effects.

Federal agencies must include appropriate mitigation measures not already included in the proposed action or alternatives. 40 CFR 1502.14(f). NEPA procedures must insure that environmental information is of high quality, including scientific integrity of discussions and analysis. 40 CFR 1500.1(b). Agencies shall identify any methodologies used and shall make explicit reference by footnote to the science and other sources relied upon for conclusions in the document. 40 CFR 1502.

Instead of analyzing potential impacts of a proposed action and then developing a plan to mitigate those adverse effects, the Powers Lake Project incorporates mitigation measures or design requirements/criteria throughout the plan of action, so that the effects are analyzed with those measures in place. Thus, it cannot be said that the EA fails to analyze the effects of the mitigation measures; instead, the EA analyzes the project under the enumerated constraints and concludes that any environmental impacts will not be significant. DN at 2 to 7.

The CEQs "Forty Most Asked Questions" discusses this approach by stating, "where the proposal itself so integrates mitigation from the beginning that it is impossible to define the proposal without including the mitigation, the agency may then rely on the mitigation measures in determining that the overall effects would not be significant." 46 Fed. Reg. 18026 at 18038, 40 Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations (1981).

The EA also contains very specific and detailed information on the ways that the timber harvest will be conducted in order to minimize effects on other resources like wildlife or watershed values. EA at 25 to 40. In addition to these specifically identified measures, the EA also cross-references applicable Best Management Practices ("BMPs"), specified in Forest Service R6 General Water Quality Best Management Practices document (USDA 1988) and standards and guidelines within the Northwest Forest Plan, to protect water quality and beneficial uses to meet the requirements of the Clean Water Act and associated state water quality laws and regulation. EA Appendix D at D-1 to D-6 and DN Appendix C at C-1 to C-14.

Further, the EA provides ample scientific citations of sources relied upon for the conclusions reached on the effects of project actions as applied with Project Design Requirements/Criteria to mitigate impacts by limiting the degree of the action; rectifying the impact by repairing; rehabilitation or restoring the affected environment; reducing the impact over time by preservation and maintenance operations during the life of the action; or compensating for the impact. EA Reference Citations at 147 to 154.

Appellant Statement #49: Appellant states that "the EA does not indicate whether a "monitoring and enforcement program has been adopted" to assure the required mitigation has been done and done

correctly. The EA does not indicate whether "all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted." Appellant concludes that the Responsible Official violates 40 CFR 1505.2(c). DA at 5.

Response: I find that the Responsible Official appropriately described the enforcement and monitoring strategies in the EA and adequately incorporated monitoring, and enforcement measures into the DN.

A monitoring and enforcement program must be adopted and summarized where applicable for any mitigation. 40 CFR 1502(c). The decision must identify monitoring and enforcement programs that have been selected and plainly indicated that they are adopted as part of the agency's decision. Specific details of mitigation measures shall be included as appropriate conditions in whatever grants, permits, or other approvals are being made by a federal agency. Mitigation and other conditions established in the NEPA document or during its review and committed as part of the decision must be implemented by the lead agency or other appropriate consenting agency. 40 CFR 1505.3.

The EA included specific monitoring and enforcement components as part of the Project Design Requirements/Criteria portion, as well as described components of the monitoring program within Chapter 2 where applicable. EA at 25 to 40. The DN and its attached appendices incorporate all mitigation measures, monitoring and enforcement program from the EA. DN at 2 and DN Appendix C at C-1 to C-14. The applicable mitigation, monitoring, and enforcement components will be carried forward into the appropriate timber sale contract during implementation. Thus, the Responsible Official has complied with CEQ regulations concerning the adoption of mitigation, monitoring, and enforcement programs.